

# TORREYA

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## LIST OF PLANTS COLLECTED ON THE PEARY ARCTIC EXPEDITION OF 1905-06 AND 1908-09 WITH A GENERAL DESCRIPTION OF THE FLORA OF NORTHERN GREENLAND AND ELLESMERE LAND

BY P. A. RYDBERG

(Continued from December *Torreya*)

### II. LIST OF PLANTS COLLECTED BY DR. L. J. WOLF AND BY DR. J. W. GOODSSELL

#### FERNS\*

*Dryopteris dilatata* (Hoffm.) A. Gray (*Aspidium spinulosum dilatatum* Hook.). A rather common species of north temperate regions of America, Europe, and Asia.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 78, 86, and 88.

*Filix fragilis* (L.) Underwood (*Cystopteris fragilis* Bernh.). A species distributed over most parts of the world in colder or mountainous regions.

Vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 43.

#### MONOCOTYLEDONS

*Alopecurus alpinus* Smith. A grass of arctic swamps and meadows of North America, Europe, and Asia, also found in the northern Rocky Mountains and the mountains of Scotland.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 23; vicinity of Cape Sheridan, Grant Land, June 15-17, 1909, *Goodsell* 56.

*Calamagrostis canadensis* L. A common grass of open woods,

\* Determined by Mr. R. C. Benedict.

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thickets, and meadows from Labrador to North Carolina, California, and Alaska.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 64 and 66.

*Deschampsia flexuosa* (L.) Trin. In dry places from southern Greenland to North Carolina, Tennessee, and Michigan; also in Europe and Asia.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 65 and 62 (the latter bears leaves only, but probably belongs here).

*Poa alpina* L. An alpine-arctic grass, distributed over arctic and subarctic North America and extending south to Quebec and Lake Superior and in the Rocky Mountains to Colorado; also in Europe and Asia.

Grant Land, July, 1906, *Wolf*. Vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 9.

*Poa glauca* Vahl. (*P. caesia* Smith). An arctic grass of circumpolar distribution; found also in the White Mountains of New Hampshire and some of the mountains of northern Europe and Asia.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 63 and 87.

*Poa glauca elatior* And. With the species but less common and apparently restricted to arctic North America.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 24.

*Poa abbreviata* R. Br. A very rare, truly arctic species, distributed from the arctic coast of North America to Greenland and Spitzbergen.

Grant Land, July, 1906, *Wolf*; vicinity of Cape Sheridan, Grant Land, June 15-July 17, 1909, *Goodsell* 57; also a sterile tuft (not numbered) which probably belongs here.

*Poa evagans* Simmons. The specimens in the collection are doubtfully referred to this species, of which there are no specimens in the herbaria here in America. The only locality given by Simmons is on the southern coast of Ellesmere Land.

Grant Land, July, 1906, *Wolf*.

*Festuca rubra* L. Meadows from Greenland to North Carolina, California, and Alaska; also in Europe and Asia.

Vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 40.

*Festuca supina* Schkur (*F. ovina supina* Hackel). A fairly common dry-land species of arctic-alpine North America, Europe, and Asia, in this country extending south to Vermont, Colorado, and California.

Vicinity of Cape Sheridan, Grant Land, June 15 to July 17, 1909, *Goodsell* 55.

*Festuca supina* forma *vivipara*. The specimens in this collection have the glumes hirsutulous, at variance with the usual form of *F. supina*. They match perfectly specimens collected by Lundbom at Nunarsuak, Greenland.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 67 and 76.

*Eriophorum Scheuchzeri* Hoppe. In swamps from Greenland to Newfoundland, Manitoba, Oregon, and Alaska; also in Europe.

Vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 3; ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 75.

*Carex canescens* L.\* Swamp from Newfoundland and Labrador to Virginia, Colorado, Oregon, and Alaska; also in Europe and Asia.

Ravine on Caribou Island, Battle Harbor, Labrador, *Goodsell* 69.

*Carex brunnescens gracilior* Britton.\* Moist places from Labrador to New York, Colorado, and British America.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 68.

*Juncoides hyperboreum* (R. Br.) Sheld. (*Luzula confusa* Lindebl.). A species of arctic America, Europe, and Asia; extending south in this country to the mountains of New England and the northern Rockies.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 22.

#### DICOTYLEDONS

*Salix Waghornei* Rydb. A rare willow, found in Newfoundland and Labrador.

\* Determined by Mr. K. K. Mackenzie.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 73. (Leaves only, but evidently belonging here.)

*Salix glauca* L. A species common in arctic and subarctic Europe. The specimens belong to the American form growing in Labrador and Newfoundland. It differs considerably from the European form, especially in pubescence, and may be distinct.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 72.

*Salix arctica* Pall. A dwarf arctic species of willow, common in Asia and western North America but rare in the northeastern part of the latter continent. Only a small sterile specimen was collected by Dr. Wolf, which seems to belong to this species.

Grant Land, July, 1906, *Wolf*.

*Salix groenlandica* (Anders.) Lundstr. A dwarf arctic willow confined to Greenland, Labrador, and the islands of Baffin Bay.

Vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 5; Grant Land, Latitude 82° 27', July, 1906, *Wolf*.

*Salix anglorum* Cham. (*S. arctica* R. Br.; not Pall.; *S. arctica Brownei* Anders.). A dwarf arctic species, ranging from Greenland to Alaska.

Vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 6 (depauperate); vicinity of Cape Saumarey, August, 1908, *Goodsell* 26.

*Oxyria digyna* (L.) Hill. The arctic sorrel is common in arctic and alpine regions of North America, Europe, and Asia, extending south in this country to New Hampshire, Colorado, and California.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 19; vicinity of Cape Sheridan, Grant Land, July 15 to Aug. 17, 1909, *Goodsell*; Grant Land, July, 1906, *Wolf*.

*Bistorta vivipara* (L.) S. F. Gray (*Polygonum viviparum* L.).

In cold swamps from Greenland to New Hampshire, Colorado, and Alaska; also in Europe and Asia.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 20.

**Alsine Edwardsii** (R. Br.) Rydb. (*Stellaria Edwardsii* R. Br.). An arctic species ranging from Greenland and Labrador to the Hudson Bay region, the Canadian Rockies, and Alaska.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 15; vicinity

of Etah, Aug. 8-16, 1908, *Goodsell* 37; Grant Land, July, 1906, *Wolf*. In *Goodsell* 15, the calyx is more or less white-villous.

*Cerastium alpinum* L. An arctic-alpine species, the range of which extends from Greenland to Quebec, the Canadian Rockies, and Alaska; also in Europe and Asia.

Grant Land, July, 1906, *Wolf*; vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 8; vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 13; ravine on Caribou Island, Battle Harbor, Aug. 15, 1909, *Goodsell* 79; vicinity of Cape Sheridan, Grant Land, June 15 to July 17, 1909, *Goodsell* 54. (The latter is a depauperate form answering to var. 3 of Simmon's Vascular Plants of Ellesmereland.)

*Cerastium alpinum lanatum* Lindebl. An arctic variety, confined to Greenland and neighboring islands.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 14.

*Wahlbergella apetala* (L.) Fries (*Lychnis apetala* L.). An arctic-alpine species, distributed through the colder parts of Europe, Asia, and North America, in the latter extending south to Labrador and in the Rockies to Utah and Colorado.

Grant Land, July, 1906, *Wolf*.

*Wahlbergella triflora* (R. Br.) Fries (*Lynchnis triflora* R. Br.). An arctic species, apparently confined to Greenland.

Vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 10; vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 41 (poor and doubtful specimen).

*Ranunculus nivalis* L. An arctic-alpine species, distributed over parts of Europe, Asia, and North America, in the latter extending from Greenland and Labrador to the northern Rockies and Alaska.

Vicinity of Cape Sheridan, Grant Land, June 15 to July 17, 1909, *Goodsell* 51.

*Papaver radicum* Rottb. (*P. nudicaule* Lange, not L.; *P. alpinum* Am. auth.; not L.). The so-called "Iceland poppy" is one of the most showy arctic species and in many places is the characteristic plant of the arctic flora. It is common in the whole arctic region of North America and Europe, less so in Asia, where *P. nudicaule* L., a related species, is more common.

*P. radicum* extends south to Labrador and in the Rockies to Colorado.

Vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 1; vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 12; vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 36; vicinity of Cape Sheridan, Grant Land, June 15-17, 1909, *Goodsell* 50; Grant Land, July, 1906, *Wolf*.

*Draba alpina* L. A circumpolar arctic species, in America extending south to Labrador and the Canadian Rockies.

Vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 2; vicinity of Cape Sheridan, Grant Land, June 15-17, 1909, *Goodsell* 53 (depauperate).

*Draba glacialis* Adams. An arctic-alpine species distributed over most of the northern part of Asia and North America, in the latter extending south in the Rockies to Wyoming.

Vicinity of Cape Sheridan, June 15-July 17, 1909, *Goodsell* 52.

A specimen with rather densely pubescent pods is doubtfully referred here. The typical *D. glacialis* has the pod glabrous or nearly so.

Grant Land, July, 1906, *Wolf*.

*Draba fladnizensis* Wulfen. An arctic-alpine plant, distributed through the arctic and subarctic regions and the higher mountains of Europe, Asia, and North America, extending as far south as the Pyrenees, Himalayas and the Rockies of Colorado.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 18; vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 46.

*Draba hirta* L. A circumpolar arctic species, also found in the mountains of Europe and Asia, but in America confined to the arctic regions.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 25.

*Braya glabella* Richardson. A rare species confined to arctic America.

Grant Land, July, 1906, *Wolf*.

*Cochlearia groenlandica* L. A strictly arctic species, probably of circumpolar distribution.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 27.

*Cochlearia fenestrata* R. Br. An arctic species, closely related to the last and often confused with it. It is apparently confined to arctic America.

Grant Land, July, 1906, *Wolf*.

*Rhodiola rosea* L. (*Sedum Rhodiola* DC.). A species not uncommon in the arctic and mountainous parts of Europe; in America confined to the north, extending south to Newfoundland and Maine in the east. It has also been collected at two stations in Pennsylvania.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 74.

*Saxifraga cernua* L. A circumpolar arctic-alpine species, in America extending south to Labrador and in the Rocky Mountains to Colorado.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 16; vicinity of Cape Sheridan, Grant Land, June 15 to July 17, 1909, *Goodsell* 60 (depauperate specimen); Grant Land, July, 1906, *Wolf*.

*Saxifraga rivularis* L. A circumboreal species, in America extending south to the White Mountains and to the Rocky Mountains in Montana.

Vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 48.

*Muscaria caespitosa* (L.) Haw. (*Saxifraga caespitosa* L.). A circumpolar arctic and subarctic species, extending in America from Greenland to Labrador, Montana, British Columbia, and Alaska.

Vicinity of Cape Sheridan, Grant Land, June 15 to July 17, 1909, *Goodsell* 59.

*Leptacea tricuspidata* (Rottb.) Haw. (*Saxifraga tricuspidata* Rottb.). An arctic-alpine species, ranging from Greenland to Labrador, Lake Superior, the Canadian Rockies, and Alaska.

Vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 47 and 42; vicinity of Cape Saumarey, Aug. 8, 1909, *Goodsell* 28.

*Leptacea flagellaris* (Willd.) Small (*Saxifraga flagellaris* Willd.). A circumboreal alpine-arctic species, extending in America south in the Rockies to Arizona.

Vicinity of Cape Sheridan, Grant Land, June 15 to July 17, 1909, *Goodsell* 58; Grant Land, July, 1906, *Wolf*.

*Antiphylla oppositifolia* (L.) Fourn. (*Saxifraga oppositifolia* L.). A circumpolar arctic-alpine species, in America extending south to Vermont, Montana and British Columbia.

Vicinity of Cape Sheridan, Grant Land, June 15 to July 17, 1909, *Goodsell* 49; vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 11; Grant Land, July, 1906, *Wolf*.

*Potentilla emarginata* Pursh. An arctic species, ranging from Greenland and Labrador to the Canadian Rockies and Alaska; also in Siberia and on Spitzbergen.

Vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 7; vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 32.

*Potentilla Sommerfeltii* Lehm. A rare arctic species, growing in Spitzbergen, Greenland, the Baffin Bay islands, and the arctic coast of America.

Grant Land, July, 1906, *Wolf*.

*Potentilla pulchella* R. Br. An arctic species of the same range as the preceding, but it has also been collected on Wrangel Island off Siberia.

Vicinity of Etah, Aug. 6-18, 1908; *Goodsell* 39.

*Potentilla Vahlia* Lehm. An arctic species, ranging from Greenland through the islands north of Hudson Bay, and the arctic coast of America to Alaska.

Vicinity of Cape Saumarey, Aug. 8, 1909, *Goodsell* 31.

*Sibbaldiopsis tridentata* (Soland.) Rydb. (*Potentilla tridentata* Soland.). A plant of rocky places, ranging from Greenland to the mountains of Georgia, west to Minnesota and Manitoba.

Ravine on Caribou Island, Battle Harbor, Aug. 15, 1909, *Goodsell* 82.

*Comarum palustre* L. A swamp plant distributed through northern and subalpine Europe, Asia, and America, ranging in the latter from Greenland to New England, Minnesota, Wyoming, California, and Alaska.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 77.

*Rubus Chamaemorus* L. An arctic and subarctic bog plant, ranging from Labrador and Newfoundland to New Hampshire, British Columbia, and Alaska; also in Europe and Asia.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 91. (The specimens are in leaf only.)

*Dryas integrifolia* Vahl. An arctic and subarctic species, distributed from Greenland to Anticosti and Alaska.

Vicinity of North Star Bay, Aug. 3-6, 1908, *Goodsell* 4. Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 21.

*Empetrum nigrum* L. An arctic and subarctic undershrub of wet and rocky places from Greenland to Maine, northern New York, Michigan, Montana, and Alaska; also in Europe and Asia.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 70.

*Viola palustris* L. In swamps from Labrador to New England, Colorado, Washington, and Alaska; also in Europe and Asia.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 83.

*Chamaenerion latifolium* (L.) Sweet (*Epilobium latifolium* L.). An arctic-alpine plant of moist places, ranging from Greenland to Quebec, Colorado, Oregon, and Alaska; also in Europe and Asia.

Vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 33.

*Epilobium palustre* L. A circumpolar bog plant, extending in this country south to the White Mountains and Ontario.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 81.

*Cornella suecica* (L.) Rydb. (*Cornus suecica* L.). A circumpolar arctic or subarctic plant of wet woods, ranging in this country from Labrador and Newfoundland to Quebec and Alaska.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 85.

### ***Conioselinum pumilum* Rose sp. nov.**

Stems simple or nearly so, low, 12 to 15 cm. high, glabrous, purplish, somewhat fluted; stem leaves 2 or 3, small, 3 to 6 cm. long, ternately divided, ultimate segment sharply toothed or cleft, glabrous; inflorescence a small compact terminal umbel, sometimes with an additional lateral one; involucre none; involucel bractlets several, filiform, longer than the pedicels; rays 12 to 18 mm. long, only slightly if at all scabrous; pedicels 3 to

4 mm. long, glabrous; fruit smooth; carpels 3 to 3.5 mm. long, a little longer than broad; stylopodium depressed.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 81.

*Pyrola grandiflora* Radius (*P. rotundifolia grandiflora* DC.). An arctic and subarctic bog plant, ranging from Greenland to Labrador and the Mackenzie River.

Vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 45.

*Cassiope tetragona* (L.) D. Don. An arctic species, distributed from Greenland and Labrador to Washington and Alaska; also in Asia.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 30.

*Ledum groenlandicum* Oeder (*L. latifolium* Ait.). A bog plant, ranging from Greenland to Massachusetts, New Jersey, Wisconsin, British Columbia, and Alaska.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 71.

*Vaccinium Vitis-idaea* L. A circumpolar undershrub, common in Europe but rare in America, there ranging from Greenland to Massachusetts, Lake Superior, British Columbia, and Alaska.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 90.

*Campanula uniflora* L. An arctic-alpine species, ranging from Greenland and Labrador to Alaska and in the Rockies south to Colorado; also in northern Europe and Asia.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 17.

*Solidago macrophylla* Pursh (*Solidago thyrsoides* E. Meyer). A plant of rocky woods from Labrador to the Catskill Mountains, Lake Superior, and Hudson Bay.

Ravine on Caribou Island, Battle Harbor, Labrador, Aug. 15, 1909, *Goodsell* 80.

*Erigeron trifidus* Hook. An arctic-alpine species, distributed from Greenland to Colorado, California, and Alaska.

Vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 38.

*Arnica alpina* (L.) Olin. An arctic and subarctic species, ranging from Greenland to Labrador, the Canadian Rockies, and Alaska.

Vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 34 and 44.

*Taraxacum phymatocarpum* Vahl. An arctic species, confined to Greenland and Ellesmere Land.

Vicinity of Cape Saumarey, Aug. 8, 1908, *Goodsell* 29; vicinity of Etah, Aug. 6-18, 1908, *Goodsell* 35.

*Taraxacum pumilum* Dahlst. An arctic species, confined to the arctic American archipelago.

Grant Land, July, 1906, *L. J. Wolf*.

*Taraxacum hyparcticum* Dahlst. An arctic species, ranging from northwestern Greenland through the arctic archipelago, along the arctic coast to Point Barrow, Alaska.

Grant Land, July, 1906, *L. J. Wolf*.

NEW YORK BOTANICAL GARDEN

## TWO SPECIES OF HABENARIA FROM CUBA

BY OAKES AMES

**Habenaria Brittonae** *sp. nov.* In general habit similar to *H. alata* Hook. 6 dm. tall, slender. *Leaves* linear-oblong to linear-lanceolate passing gradually into the foliose acute bracts of the stem. *Raceme* 12 cm. long, slender, rather densely flowered, the bracts nearly equalling or exceeding the flowers. *Lateral sepals* 6.5 mm. long, lanceolate, acute, with the midnerve produced under the point into a setiform tip, margin obscurely denticulate. *Upper sepal* broadly ovate, 5 mm. long, otherwise similar to the lateral. *Petals* subsimple or obscurely bipartite. Posterior division linear-oblong, rounded at the tip, obtuse, 5 mm. long, about 1 mm. wide, recurved-falcate, anterior division in the form of an obtuse, basal protuberance or tooth. *Labellum* tripartite, lateral divisions shorter than the middle one, setaceous, about 3 mm. long, middle division linear, 6 mm. long, obtuse, convex, the margins strongly deflexed. *Stigmatic processes* longer than the anther canals, flattened suborbicular. *Spur* longer than the labellum, about equalling the ovary or shorter, clavate, subacute, about 1 cm. long.

*Folia* lineari oblonga, alterna, (?) 4-5. *Bracteae* caulis vaginantes super folia lineari-lanceolatae, acutae, infra folia obtusae. *Bracteae inflorescentiae* lanceolatae, acutae, ovaria longitudine excedentes. *Sepala lateralalia* lanceolata, ad apicem cuspidem munita. *Sepalum superius* ovatum, obtusum. *Petala* sub-